

# RESPONSIVE MEDIA

- LEVEL 5 -

.....



# RESPONSIVE MEDIA

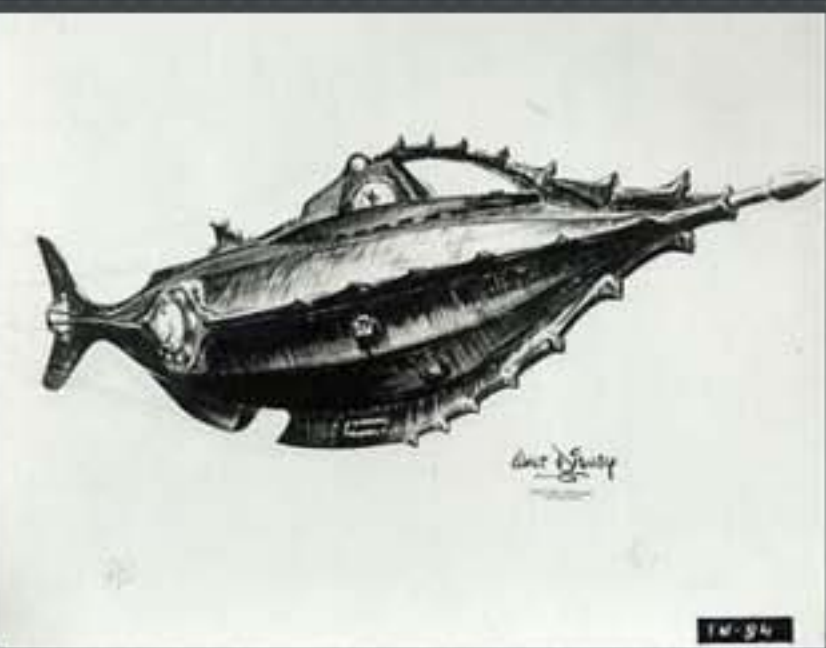
Responsive Images

Retina Images



Level 5





The Nautilus is a masterpiece containing masterpieces. Here are the several dimensions of the boat you are about to see. It is an elongated cylinder with conical ends. It is very like a cigar in shape, a shape already adopted in London in several constructions of the same sort. The length of this cylinder, from stem to stern, is exactly 70 meters, and its maximum breadth is eight meters. It is not built on a ratio of ten to one like your long-voyage steamers, but its lines are sufficiently long, and its curves prolonged enough, to allow the water to slide off easily, and oppose no obstacle to its passage. These two dimensions enable you to obtain by a simple calculation the surface and cubic contents of the Nautilus. Its area measures 1011.45 square meters; and its contents 1,500 cubic meters; that is to say, when completely immersed it displaces 1500.2 cubic meters of water, or 1500.2 metric tons.

JOURNEY

INTO

MOBILE

Level 5



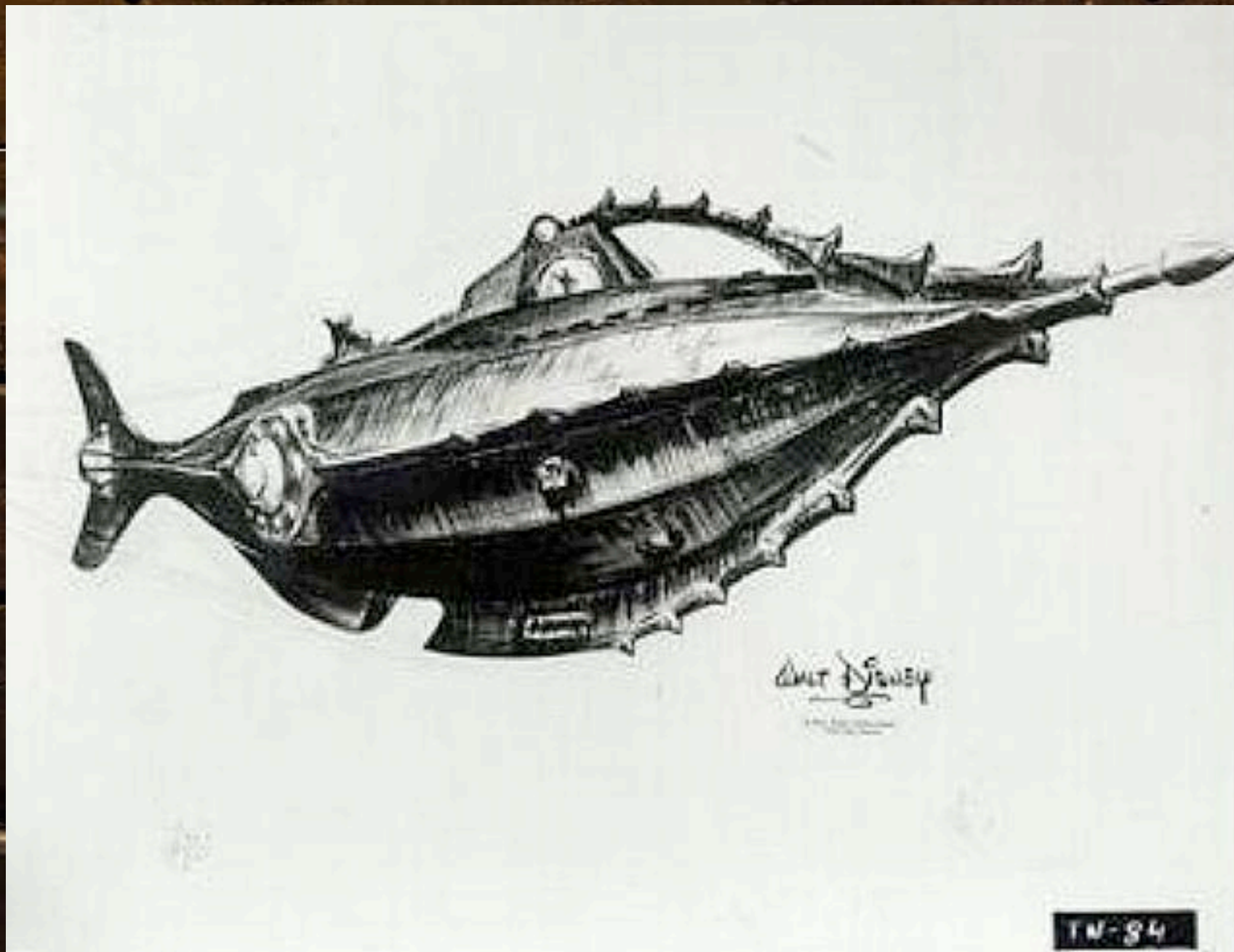
# RESPONSIVE MEDIA

*1. Save out larger images*



Level 5





640 x 490



Level 5



# RESPONSIVE MEDIA

## *2. Use max-width*

```
img {  
  max-width: 100%;  
}
```



Level 5



# RESPONSIVE MEDIA

## 2. Use max-width

```
about img {  
  width: 29.6875%;  
}
```



The Nautilus is a masterpiece containing... It is an elongated cylinder with conical e... in several constructions of the same sor... and its maximum breadth is eight meter... but its lines are sufficiently long, and its... oppose no obstacle to its passage. Ther... surface and cubic contents of the Nautil... cubic meters; that is to say, when comp... metric tons.



Level 5



# RESPONSIVE MEDIA

```
img,  
embed,  
object,  
video {  
    max-width: 100%;  
}
```



Level 5



# RESPONSIVE MEDIA

*No IE6 support*

*See: <http://clagnut.com/sandbox/imagetest3/>*



Level 5



# RESPONSIVE MEDIA

## Responsive Media on Windows

- *Prior to Windows 7, poor max-width support*
- *Specifically on Firefox 2 & IE7*
- *Use AlphasImageLoader*

<http://msdn.microsoft.com/en-us/library/>



Level 5



# RESPONSIVE MEDIA

## More Robust Options

- **FitText** to make font-sizing flexible: [<http://fittextjs.com/>]
- **Lettering.js** for more robust control over your typography: [<http://letteringjs.com/>]
- **FitVids.js** for flexible, responsive videos: [<http://fitvidsjs.com/>]



Level 5



# RESPONSIVE MEDIA

**Responsive Images**

**Retina Images**



Level 5



# RETINA IMAGES

**Retina Images** =  $1.5x - 2x$  the pixel density

*Double the image size?*



*Use Media Queries*



Level 5



# RETINA IMAGES

```
@media
```

```
only screen and (-webkit-min-device-pixel-ratio: 1.5),
```

```
only screen and (min-device-pixel-ratio: 1.5) {
```

```
    /* Styles */
```

```
}
```



Level 5



# RETINA IMAGES

logo.png

200px



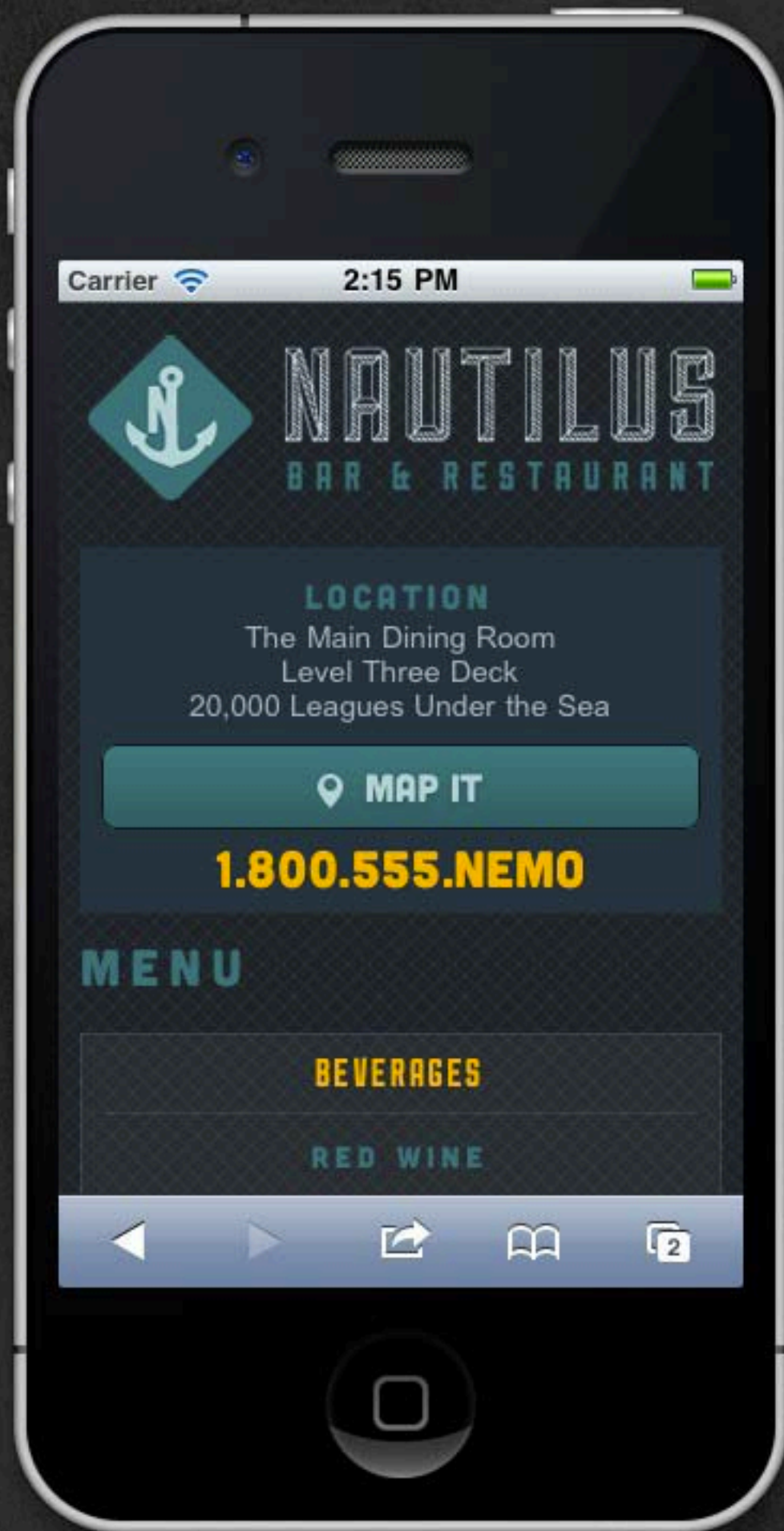
logo@2x.png

400px



Level 5





12px by 16px



24px by 32px



# RETINA IMAGES

```
/* ORIGINAL CSS */
```

```
.logo {
```

```
    background-image: url(images/logo.png) no-repeat;
```

```
}
```



Level 5



# RETINA IMAGES

```
@media
```

```
only screen and (-webkit-min-device-pixel-ratio: 1.5),
```

```
only screen and (min-device-pixel-ratio: 1.5) {
```

```
  .logo {
```

```
    background-image: url(logo@2x.png);
```

```
    -webkit-background-size: 12px 16px;
```

```
    background-size: 12px 16px;
```

```
  }
```

```
}
```

*background-size equal to the size of the original image  
fills the container with the higher res image*



Level 5



 **MAP IT**



 **MAP IT**



# BUT WHAT ABOUT FILE SIZE?

**PictureFill** - *created by Scott Jehl*

<http://scottjehl.com/picturefill/>

*Creates <picture> element*

*specify different image sizes to be served by different devices*





# RETINA IMAGES

```
<picture alt="Our Alternate Text">  
  <!-- Smallest size first - no @media qualifier -->  
  <source src="content-image.jpeg" />  
  <!-- Large size - send to viewports 800px wide and up -->  
  <source src="content-image-lrg.jpeg" media="(min-width:  
800px)" />  
</picture>
```



*<picture> doesn't exist  
must include picturefill.js in your <head>*

Level 5



# RETINA IMAGES

```
<picture alt="Our Alternate Text">
  <!-- Smallest size first - no @media qualifier -->
  <source src="content-image.jpeg" />
  <!-- Large size - send to viewports 800px wide and up -->
  <source src="content-image-lrg.jpeg" media="(min-width:
800px)" />
  <!-- Fallback content for non-JS or non-media-query-
supporting-browsers -->
  <noscript>
    
  </noscript>
</picture>
```

*when javascript is disabled*

LEVEL 5